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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/084,889 | 03/01/2002 | Shin Ito | NGBC.0012 | 8166 |

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EXAMINER

AGUSTIN, PETER VINCENT

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2652

DATE MAILED: 07/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/084,889

Applicant(s)

ITO, SHIN

Examiner

Peter Vincent Agustin

Art Unit

2652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 9-12 is/are rejected.
- 7) ☒ Claim(s) 1-8 and 13 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Drawings

1. Figures 12 & 13 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors, e.g., page 1, lines 6 & 9: “magnet-optic” should be --magneto-optic--; page 12, line 16: “flames” should be --frames--. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

4. Claims 1-8 objected to because of the following informalities:

Claim 1, line 9: “one of faces” should be --one of the faces--.

Claim 2, line 5: “increased” should be --maximized--.

Claim 5, line 9: “one of opposed” should be --one of the opposed--.

Claim 6, line 2: “two of fixing” should be --two of the fixing--.

Claim 6, line 5: “may be increased” should be --is maximized--.

Claims 3, 4, 7 & 8 are objected to because they are dependent on objected base claims.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim 9 rejected under 35 U.S.C. 102(b) as being anticipated by Lee (US 5,872,662).

Lee discloses an optical pickup device (figure 3) comprising: a mounting frame (97); and a half mirror (96), wherein said half mirror is mounted onto said mounting frame with minimum number of contact points, the contact points substantially constituting a plane. It should be noted that Lee does not disclose the exact number of contact points, but Lee would have been inclined to use what is considered to be the minimum number of contact points in order to obtain optimum adherence while minimizing the number of optical parts.

7. Claim 9 rejected under 35 U.S.C. 102(e) as being anticipated by Tachikawa et al. (hereafter Tachikawa) (US 2002/0118628).

Tachikawa discloses an optical pickup device (figure 1) comprising: a mounting frame (6); and a half mirror (3), wherein said half mirror is mounted onto said mounting frame with minimum number of contact points, the contact points substantially constituting a plane.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2652

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee.

Lee discloses an optical pickup device (figure 3) comprising: a mounting frame (97); and a half mirror (96), wherein said half mirror is mounted onto said mounting frame. However, Lee does not disclose that the half mirror is mounted onto said mounting frame with three contact points.

At the time the invention was made, it was well-known to mount a half mirror with any number of contact points for the purpose of maintaining a stable connection of optical components and selection of an arbitrary number of contact points, e.g., the claimed three contact points would have been obvious to one of ordinary skill in the art. One of ordinary skill in the art, furthermore, would have recognized that use of either the arbitrary number of contact points taught by Lee or the claimed three contact points would have been obvious equivalent alternative types of mounting techniques, because both perform the same function of maintaining a stable connection of optical components. Furthermore, it would have been obvious to arrange the three contact points remote from each other and to position the three contact points near corners of said half mirror in order to obtain maximum adherence.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Leterme et al. (US 4,719,614) discloses an optical recording-reading head using an adjustable mount for the pivoting mirror.

Fujino (US 5,296,988) discloses an optical head with an adjusting mechanism for adjusting the position of an optical mirror.

Allowable Subject Matter

11. Claims 1-8 & 13 would be allowable if rewritten to overcome the minor objections noted above.

12. The following is a statement of reasons for the indication of allowable subject matter:

In regard to independent claims 1 & 5, no prior art of record alone or in combination discloses or suggests an optical pickup device comprising: a light source for irradiating a light; a pair of mounting frames which are opposed to each other interposing a space for passing the light from the light source; an optical component in a polyhedral shape, or a half mirror in a shape of a rectangular parallelepiped thin plate, which is mounted on the mounting frames in a partially overlapped manner and adapted to polarize the light; and **three adhesive parts, wherein two of the adhesive parts fix one of the faces of the half mirror or the optical component, which are substantially parallel to an optical axis of the light, to one of the pair of mounting frames in two contact points, and one of the adhesive parts fixes the other face of the half mirror or the optical component, which are substantially parallel to an optical axis of the light, to the other mounting frame in one contact point.**

In regard to claim 13, no prior art of record alone or in combination discloses or suggests an optical pickup device comprising: a mounting frame; and a half mirror, wherein said half mirror is mounted onto said mounting frame with three contact points, and wherein **an overlapping area between said mounting frame and said half mirror of one contact point has shorter area than that of two contact point side.**

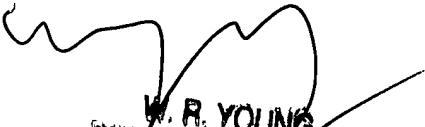
Claims 2-8 are allowable because they are dependent upon allowable base claims.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Vincent Agustin whose telephone number is (703) 305-8980. The examiner can normally be reached on Monday thru Friday 9:00AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PVA
05/21/2004


W. R. YOUNG
PRIMARY EXAMINER